

TWIN STATE ENVIRONMENTAL CORP.

P.O. Box 711, St. Albans, VT 05478 • TEL: (802) 527-8144 FAX: (802) 527-0198

June 9, 1993

Ms. Lynda Wedderspoon, Site Manager Sites Management Section Vermont Agency of Natural Resources 103 South Main Street/West Office Waterbury, Vermont 05671-0404

RE:

Lyn's Market

East Fairfield, Vermont SMS Site No. 90-590

Dear Ms. Wedderspoon:

In response to recent requests made by the Sites Management Section (SMS), Twin State Environmental Corporation (TSEC) has sampled the monitoring wells which exist at the above referenced site for data and laboratory analysis. The results of this sampling event are presented below for your review. Additionally, the analytical report for the samples analyzed is attached to this correspondence.

Sampling was conducted at Lyn's Market by TSEC on April 28, 1993. Data obtained from each of three (3) monitoring wells identified on the attached site plan, includes PID readings from the headspace of each well and water level elevation data. Additionally, each well was sampled for laboratory analysis by EPA Method 8020.

Immediately upon gaining access to each well's headspace, PID readings were collected from this area with the use of a Thermo Instruments OVM calibrated to isobutylene, a benzene equivalent. This survey revealed no detectable readings from MW-1 or MW-2 and an insignificant reading of 0.6 parts per million (ppm) was collected from well number MW-3.

As noted above water level data was additionally collected from each of the monitoring wells. These measurements, which appeared relatively consistent in all three (3) wells, were used to determine the height of the water column and appropriate purge volumes. Each well was then purged of a minimum of three (3) well volumes with the use of a peristaltic pump. Following purging, each well was sampled for laboratory analysis of purgeable aromatic compounds by EPA Method 8020. Samples were collected with the use of a decontaminated Teflon bailer.

Note that since these monitoring wells have apparently not been surveyed, the water level data collected during this sampling event could not be used for the generation of a groundwater contour map.

The results of analysis indicate that low levels of contamination was present in each of the well samples analyzed. Sample number MW-1 (collected from well no. MW-1) was reported to contain 342 ug/l MTBE; the MW-2 sample was found to contain 24.5 ug/l Xylenes and <5 ug/l MTBE (note MTBE was detected below the method detection limit of 5 ug/l); and sample MW-3 (from well no. MW-3) was reported to contain 35.4 ug/l Ethylbenzene and 120 ug/l Xylenes.

In addition to well samples analyzed, one (1) equipment blank (EB-1) was also analyzed for quality assurance/quality control purposes. No compounds were detected by the analysis of this sample.

If you have any questions pertaining to this sampling episode, please contact me at either my home office (877-2423) or at TSEC's St. Albans office.

Very truly yours,

TWIN STATE ENVIRONMENTAL CORPORATION

Jennifer von Rohr Project Manager

attch.

cc: Skip Vallee, R.L. Vallee, Inc.

lynsmrkt.ltr



32 James Brown Drive Williston, Vermont 05495 (802) 879-4333 FAX'879-7103

REPORT OF LABORATORY ANALYSIS

CLIENT: TSEC

PROJECT NAME: Lyn's Market REPORT DATE: May 10, 1993

DATE SAMPLED: April 28, 1993

PROJECT CODE: TSEC1499

REF.#: 45,160 - 45,163

Enclosed please find the results of the analyses performed for the samples referenced on the attached chain of custody. Chain of custody did not indicate sample preservation.

All samples were prepared and analyzed by requirements outlined in the referenced method and within the specified holding times. All instrumentation was calibrated with the appropriate frequency and verified by the requirements outlined in the referenced method. Blank contamination was not observed at levels affecting the analytical results.

Analytical method precision and accuracy was monitored by laboratory control standards which included matrix spike, duplicate and quality control analyses. These standards were determined to be within established laboratory method acceptance limits.

Individual sample performance was monitored by the addition of surrogate analytes to each sample. All surrogate recovery data was determined to be within laboratory QA/QC guidelines unless otherwise noted.

Reviewed b

Harry B. Locker, Ph.D.

Laboratory Director

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32 James Brown Drive Williston, Vermont 05495 (802) 879-4333 FAX 879-7103

LABORATORY REPORT

EPA METHOD 8020 -- PURGEABLE AROMATICS

CLIENT: TSEC

PROJECT NAME: Lyn's Market REPORT DATE: May 10, 1993

DATE SAMPLED: April 28, 1993 DATE RECEIVED: April 29, 1993

ANALYSIS DATE: May 7, 1993

PROJECT CODE: TSEC1499

REF.#: 45,160

STATION: MW-1

TIME SAMPLED: 14:15 SAMPLER: Von Rohr

<u>Parameter</u>	Detection Limit (ug/L)	Concentration (ug/L)	
Benzene	1	ND¹	
	1		
Chlorobenzene	1	ND	
1,2-Dichlorobenzene	1	ND	
1,3-Dichlorobenzene	1	ND	
1,4-Dichlorobenzene	1	ND	
Ethylbenzene	1,	ND	
Toluene	1	ND	
Xylenes	1	ND	
MTBE	5	342.	

Bromobenzene Surrogate Recovery: 105%

NUMBER OF UNIDENTIFIED PEAKS FOUND: 0

NOTES:

1 None detected



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LABORATORY REPORT

EPA METHOD 8020 -- PURGEABLE AROMATICS

CLIENT: TSEC

PROJECT NAME: Lyn's Market REPORT DATE: May 10, 1993 DATE SAMPLED: April 28, 1993 DATE RECEIVED: April 29, 1993

ANALYSIS DATE: May 7, 1993

PROJECT CODE: TSEC1499

REF.#: 45,161 STATION: MW-2

TIME SAMPLED: 15:50 SAMPLER: Von Rohr

<u>Parameter</u>	Detection Limit (ug/L)	Concentration (ug/L)
_		
Benzene	1	ND^1
Chlorobenzene	1	ND
1,2-Dichlorobenzene	1	ND
1,3-Dichlorobenzene	1	ND
1,4-Dichlorobenzene	1	ND
Ethylbenzene	1.	ND
Toluene	1	ND
Xylenes	1	24.5
MTBE	5	TBQ ²

Bromobenzene Surrogate Recovery: 94%

NUMBER OF UNIDENTIFIED PEAKS FOUND: >25

NOTES:

- 1 None detected
- 2 Trace below quantitation limits



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LABORATORY REPORT

EPA METHOD 8020 -- PURGEABLE AROMATICS

CLIENT: TSEC

PROJECT NAME: Lyn's Market REPORT DATE: May 10, 1993

DATE SAMPLED: April 28, 1993 DATE RECEIVED: April 29, 1993 ANALYSIS DATE: May 7, 1993 PROJECT CODE: TSEC1499

REF.#: 45,162 STATION: MW-3

TIME SAMPLED: 16:35 SAMPLER: Von Rohr

Detection Limit (ug/L)1	Concentration (ug/L)
<u> </u>	, - ,
10	ND^2
10	ND
10	35.4
10	ND
10	120.
50	ND
	10 10 10 10 10 10 10

Bromobenzene Surrogate Recovery: 101%

NUMBER OF UNIDENTIFIED PEAKS FOUND: 18

NOTES:

- 1 Detection limit raised due to high levels of contaminants. Sample run at 10% dilution.
- 2 None detected



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LABORATORY REPORT

EPA METHOD 8020 -- PURGEABLE AROMATICS

CLIENT: TSEC

PROJECT NAME: Lyn's Market

REPORT DATE: May 10, 1993 DATE SAMPLED: April 28, 1993

DATE RECEIVED: April 29, 1993 ANALYSIS DATE: May 7, 1993 PROJECT CODE: TSEC1499

REF.#: 45,163

STATION: EB-1

TIME SAMPLED: 13:30 SAMPLER: Von Rohr

<u>Parameter</u>	Detection Limit (ug/L)	Concentration (ug/L)
.	4	NIDI
Benzene	1	ND_1
Chlorobenzene	1	ND
1,2-Dichlorobenzene	1	ND
1,3-Dichlorobenzene	1	ND
1,4-Dichlorobenzene	1	ND
Ethylbenzene	1	ND
Toluene	1	ND
Xylenes	1	ND
MTBE	5	ND

Bromobenzene Surrogate Recovery: 99%

NUMBER OF UNIDENTIFIED PEAKS FOUND: 0

NOTES:

1 None detected



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EPA METHOD 8020 LABORATORY REPORT

MATRIX SPIKE AND DUPLICATE LABORATORY CONTROL DATA

CLIENT: TSEC

PROJECT NAME: Lyn's Market REPORT DATE: May 10, 1993 DATE SAMPLED: April 28, 1993 DATE RECEIVED: April 29, 1993 ANALYSIS DATE: May 7, 1993 PROJECT CODE: TSEC1499

REF.#: 45,163 STATION: EB-1

TIME SAMPLED: 13:30 SAMPLER: Von Rohr

<u>Parameter</u>	Sample(ug/L)	Spike(ug/L)	Dup1(ug/L)	Dup2(ug/L)	Avg % Rec
Benzene	0	10	11.5	12.5	120%
Toluene	. 0	10	10.9	11.5	112%
Ethylbenzene	0	10	10.9	11.1	110%
Xylenes	0	30	28.7	30	98%

CHAIN-OF-CUSTODY RECORD

006838*

Williston, Vermont 05495 (802) 879-4333

Project Name: LYN'S MARKET Site Location: F. Fare Field Reporting Address: TSEC. Box 711 ST- Albans, VT Billing Address: SAME (TYEC) Endyne Project Number: TSFC 1499 COMPANY: TWIN STATE THINK CORD. Sampler Name: VON ROMP Contact Name/Phone #: VON RONZ /523-9144 Phone #: @ > 2 40144 1077-3139 C Sample Containers Analysis Sample R Field Results/Remarks Sample Location Matrix Date/Time Rush Lab# Required Preservation M Type/Size MW-1 45160 Watre 4.2843/1415 vica /4nmi 1020 MW-5 VOA/Ann 451101 8420 1/10 MW-3 8020 45/62 -faup. Blank 2020 Wahe 45163 Relinguished by: Signature LYMAN VM Received by: Signature Date/Time Relinguished by: Signature Received by: Signature Date/Time Requested Analyses Total Solids TKN 11 16 Metals (Specify) 21 EPA 624 26 EPA 8270 B/N or Acid рH 1 2 Total P 12 TSS 17 Coliform (Specify) EPA 625 B/N or A 27 EPA 8010/8020 Chloride Total Diss. P 13 TDS 18 COD 23 EPA 418.1 EPA 8080 Pest/PCB 3 Ammonia N BOD. Turbidity 19 BTEX EPA 608 Post/PCB 4 Nitrite N 15 Conductivity 20 EPA 601/602 25 EPA 8240 5 Nitrate N Alkalinity TCLP (Specify: volatiles, semi-volatiles, metals, pesticides, herbicides) 29 30 Other (Specify):